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Inaugural Dissertation

On

Dyspepsia

By

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of Philadelphia

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Dyspepsia
or
Indigestion

Implies not only the imperfect performance of the act of digestion; but also an impaired condition, of the functions of the Stomach & Chylopoetic viscera in general — The term Dyspepsia is derived from Δυς, bad — & Πεπτειν; to digest, or concoct, and it has become a disease of much more frequent occurrence in modern, than in former times; probably owing to the present refinements in Cookery, to the comparative ease in which we live, & to the mind being more exercised than the body, by the many sedentary kinds of business now followed;— The Stomach also in many other complaints sympathises with the

part affected —

— Process of Digestion —

In the process of Digestion after the food has been masticated in the mouth & completely imbued with saliva, it passes into the Stomach, where it is converted into Chyme, by being successively exposed to the action of the Gastric Juice as it is secreted from the surface of that Viscus; When the food is converted into Chyme it is moved on by the peristaltic motion of the Stomach through the Pylorus, into the Duodenum & there by the action of the Biliary & Pancreatic fluids on the Chyme, the Chyle is separated from it, and is taken up by the numerous Lacteals, opening on the surface of the Duodenum, Jejunum & Ileum, & progressively decreasing in number from the Duodenum to the Valve of the Colon = The Chyle passes along the Lacteals through the mesenteric glands into the Thoracic Duct, by which it is emptied into=

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the Left Sub-Clavian Vein, and thus is mixed with the Blood returning to the Heart.

—The excrementitious portion of the food is propelled on by the vermicular motion of the small Intestines into the Colon, where the thinner portion is absorbed, and the remainder acquires the peculiar foecal smell. From the Colon it passes to the Rectum: by the contractions of which, assisted by the voluntary action of the Abdominal muscles, it is finally discharged.

There is great difference in the rapidity of Digestion in different persons, and the knowledge of this is of great importance; for by timing the meals so that one, shall not interfere with the digestion of the other; and so also that the digestive organs shall be no long period entirely inactive, we shall be able sometimes to cure Indigestion —"—"—

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Symptoms.

Dyspepsia commences with oppression, and sense of load at the stomach after eating, appetite not uniform, Acid Eructations, Furred tongue, or in cases induced by spurious Liquors, the tongue is smooth and glassy, the papillæ apparently absorbed; The surface of the body, and feet are Cold and Chilly, The cutaneus vessels inactive, the Bowels are irregular, the discharges small in quantity & frequently unnatural in appearance, sometimes there is disordered vision, Pain in Head, Vertigo, Tinnitus Aurium.

As the disease advances there is greater distress after eating, the food often being rejected by vomiting which for the time relieves the uneasiness, there is much depression of Spirits which unfits the individual for ~~Business~~ Business, there is also Palpitations, Flatulence, Cardialgia, Pyrosis, Gastrodynia, Emaciation,

= Occasional Diarrhoea, sometimes the food passes off undigested; Tenderness of the Epigastrium, which denotes that inflammatory action is commencing, that if not arrested will eventuate in structural derangement of the stomach or some other organ —o—

Causes.

Causes, are such as operate immediatly on the stomach, or mediatly through the interven= =tion of some other part or the system at large. As Improper food, or drink, Strong Green Tea, or Coffee, Spirituous Liquors, Cold Drink when the system is debilitated, Overloading the stomach — The use of Tobacco, or Emetics, or nitre. — Hepatic and other diseases, anxiety, Close confinement to Study, Repelled Eruptions, bad Teeth, &c. &c —

For Dyspeptics whatever forms or

tough solid mass in the stomach, whatever is impregnated with an Empyreumatic oil, as Pastry or Fryed meats, or meat, whose fibres have been condensed by Salt, and whatever is liable to undergo the acetous fermentation is improper such as, Soups, Fresh Vegitables &c

The most suitable food is Venison, Mutton, Game, Beef, White Poultry, Farinaceous articles as Rice, Stale Bread, particularly Bread, made from unbolted flour, Pureils, Soft boiled Eggs. Oysters lightly cooked. For Drink at meals, instead of Coffee or Tea use Milk or Chocolate deprived of its oil or Barley or Rye Coffee, or the Yolks of two Eggs beat up with sugar, a Tea-spoonfull of Ginger & a Pint of Boiling water, or if there be much acidity, use Milk with

one third part Lime Water; As a Simple drink pure water is best, sometimes it is usefull & even necessary to add Wine of which Port and Madeira are best, or Ginger Tea, may be employed.

Brandy and Water though it relieves the uneasiness should never be resorted to for a fondness may thus be created for it, which afterwards can not be resisted, a substitute will be spoken of in the treatment.

The Appearances on Dissection are different in different cases, the Stomach is found relaxed & flabby, the consistence of the mucous coat altered, sometimes exhibiting the appearance of Chronic Inflammation; in Drunkards with the surface smooth & polished; Schirrus of the Pylorus,

The Liver, Spleen, or Pancreas disordered.

Pathology.

It commences not in inflammation but in irritation of the nerves supplying the Stomach: there first being functional derangement, which being continued Inflammation is induced causing if not arrested structural disorganisations.

The action of the muscular coat of the Stomach is impaired depending on the deficiency of nervous energy. Hence the weight, and oppression after meals. The intestinal coats also participate in the functional disorder; particularly the Duodenum, which sometimes is the chief seat of the disease, it being most likely to be affected from the improper condition in which the food is transmitted to it the stomach being affected primarily.

In the Second Stage there is Chronic Inflam=

=mation

Inflammation, and the whole Chylopoietic viscera becoming more or less involved, We have, tenderness of the Epigastrium and Hypo=chondrium, with febrile movements & general disorder of the system & finally the third stage is induced when there is structural derangement, Scirrhus, ulceration or thick=ening of the stomach or Pylorus.

Prognosis

Must be deduced from the causes, the stage of the disease, the force of the attack, the age & habits of the patient, & also his disposi=tion to submit to necessary restrictions.

If there be no organic derangement, & other things favourable. We may pronounce a cure possible, but if there be structural derangement and the habits or age of the patient unfavourable we can only pal=liate — —

Treatment

Must be regulated according to the stage of the disease which may be arrang under three heads. viz –

1st Functional derangement of Stomach &c

2nd Inflammation

3rd Structural derangement –

When called to a case in the first stage after evacuating the Stomach & Intestines the indications are threefold –

1st To obviate or remove the exciting causes

2nd To relieve urgent symptoms & correct Secretions

3rd To restore tone to the Stomach, Intestines, and system generally –

To cleanse the alimentary Canal first give a mild Emetic of Ipecacuanha & follow it by gentle aperients —— Drastic Cathartics, or the Saline are injurious & increase the irritation, while the mild ones relieve it, and

increase the powers of digestion –
A Combination will mostly agree better than any individual article –
The following is a good Formula –
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Powdered Rhubarb
" Aloes . . . āā gr ij
" Ipecacuanha . .
Venetian Soap . .
Calomel . . . . . āā gr ß
Oil of Cloves . . . . gtt ¼
Water Q.S.

To be made into a pill and taken going to bed –

Should a more active purgative be be demanded or should accumulations take place in the Duodenum, the Infusion of Senna will be suitable; To prevent its griping add some aromatic and bitter

as Fennel Seed and Gentian; when the Duodenum is affected, (manifested by the uneasiness coming on several hours after eating, by the swelling in its region &c.) the Vinous Tinct: of Colchicum has been highly praised, conjoined with an aperient particularly the sulphate of Potass —.

Cardialgia

Depends on an unnatural portion of acid, either generated by the food, or secreted by the stomach itself: When it depends on the food, it will be relieved by regulating the diet & by the use of Antacids, with gentle aperients. The Two most suitable antacids are Soda and Ammonia, the first will form with the acid which is Muriatic, a Salt peculiarly adapted for a Condiment, the other being volatile will neutralize the Gazeous Acid The following is a good Formula =

Dried Carbonate of Soda ℥i
Aromatic Spt: of Ammonia ℥ii
Comp: Spt: of Lavender ℥i
Cinnamon Water ℥iv.

Dose ℥ii or iij in sweetened Water this corrects acidity, relieves the distress after eating and will form a good substitute for Brandy as a Stimulus.

The Medicated Ley is also a very serviceable Antacid, or Lime Water, or Lime water & Milk.

If the Acidity depend on morbid secretion it is often Symptomatic of organic disease in the neighbouring viscera and will not be relieved by ant acids; In such cases the Sp: of Turpentine or Nitric Acid will sometimes relieve.

Flatulence

This uneasiness arises more from the

initable condition of the Mucous Membrane, than from the quantity of Gas itself, for the healthy bowell may be distended without uneasiness, hence instead of Carminatives sedatives should be employed as Hyos= =cyamus or Cicuta.

Palpitations

Sometimes are distressing and may cause the disease to be mistaken for an affection of the Heart; to relieve this symptom antispasmodics are most effectual, as Ether, Musk, Assafoetida, Hoffmans Ana= =dyne or Opium ---

Pyrosis

Consists in an involuntary discharge of watery fluid, from the Stomach varying from one ounce to a pint or more; It depends on a Morbid condition of the nerves presiding over secretion, when un=

unattended with pain it will be relieved by the use of Alkalies, Opiates, and Mild Astringents, Conjoined with a properly regulated animal Diet: But if there be pain at the Epigastrium Animal food, will aggravate the disease; instead of it use a Milk diet, Stale Bread & Milk, and of this not more than six ounces should be taken at once, in addition to this make use of Sedatives as Extract of Cicuta grs IV or V two or three times a day with Lime water:* If the Pyrosis be symptomatic of disease of other viscera, all methods of cure will fail, till we cure the disease on which it depends.

Gastrodynia

or Spasm of the Stomach if not relieved by antacids &c, requires the use of Anti-spasmodic medicines, as Musk, Ether,

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Hoffmans Anodyne, or Spt: of Turpentine.
Sometimes it will be relieved by a draught of bland fluid as Milk, or Hot Water.
For this Symptom the Sub: Nitrate of Bismuth has been much recommended, dose grs V or VI, should the above medicines fail: apply a Blister over the Stomach;= In the torpid or irregular action of the muscular coats of the Bowells the Compound Decoction of Aloes has been highly praised by Paris in his work on Diet.

Cold Feet, & Inaction of Cutaneous Vessels are symptoms that should by all means be obviated: to remove the first, wear flan=nel socks underneath the stockings dust=ed with Cayenne Pepper or apply plas=ters, spread with Shoemakers wax to the soles of the feet.
To promote action in the Cutaneous Vessels

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make use of the warm Salt Bath, about one hour before dinner; or have the body rubbed with Salt in a warm room —

Vomiting

Must be obviated by avoiding all articles that are known to disagree, by taking but a small quantity of food at once, by avoiding fatigue before, or exercise after meals, by assisting the Stomach to retain its contents by determined resolution, by the use of certain medicines, as the effervescing draught, the Spice Plaster &c — In adapting the food we must remember the stomach requires a change; Articles that have been suitable after a little while may irritate the stomach;

" " Certain condiments also assist Dyges=
=tion as Salt, Mustard or Horse Radish=

" " There are sometimes anomalous Cravings of the stomach for ~~food~~ articles

apparently injurious, which by being indul=ged in prove beneficial: when there is a fixed strong disire for some particular article, it is the language of nature, & should be cautiously gratified..

If the Hepatic Secretions are deranged administer Calomel, or Blue pill, in small doses, as an alterative, keeping the Bowells regularly open, if necessary by the Purgative pill before mentioned, to assist the Mercury the Nitro-Muriatic Acid Bath or Pediluvium will be beneficial —

The secretions of the Skin, of the Liver, of the Bowells &c being corrected, we may now if necessary employ Tonics provided there be no signs of Inflammation. —

Mineral Tonics are best partic=ularly Chalybeates - The next are the Vegitable Bitters, in infusion or powder - Sometimes

a combination of the mineral & Vegetable suit better than either separately, as a combination of the Rust of Iron, Columbo or Gentian & Ginger.

Exercise in the fresh air, particularly on Horseback is very necessary, As a Tonic Ipecacuanha in 1/4 grain doses is advantageous.

In the 2nd Stage when Inflammatory action has commenced, manifested by the Tenderness at the Epigastrium, by the febrile movements, the Hard pulse &c, the treatment must be considerably varied, Local depletion by leeches must be repeatedly performed, which if not successfull may be aided by a Blister: The Saline Cathartics are now the most suitable particularly given in an effervescing draught. In the diet, animal food &

all articles of stimulating character must be avoided, using in their place the vegetable mucilages, vegetable food & even the Sub-acid Fruits, at the same time attending to the regulations before mentioned —

"In the 3rd Stage when structural derangement has taken place, manifested by the violence, & obstanicy, before mentioned; & by the Hectic character of the Fever &c — nothing can be expected beyond simple palliation by remedies before alluded to —

"There is one form of Dyspepsia that occurs in Old Persons, the constitution to use a common expression breaks, the Coun=tenance & skin is pallid, the lips pale, the Ears white & contracted, the ankles swollen, the Bowells relaxed or otherwise,

The tongue smooth & red, the Root of nails Chalky. & there is vomiting sometimes

of darkish matter in considerable quantity, here treatment seems of little avail. as it terminates mostly in Death ..

Charles Duffnage

October 1828